RESEARCH PROPOSAL

Epidemiologic Support of Project Area 1.2
Under the Agreement on Cooperation in Research on Radiation Effects

Uniformed Services University of the Health Sciences
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4301 Jones Bridge Road
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Requested Project Period:
January 30, 1996 to January 30, 1997

Principal Investigator: Terry L. Thomas, M.S., Ph.D.
Associate Professor and Director, Division of Epidemiology and Biostatistics, Department of Preventive Medicine and Biometrics

Submitted to: Office of International Health Programs
U.S. Department of Energy, EH-63
Germantown, MD 20874-1290
ATTN: Dr. Elaine Gallin, Deputy Director

PROPOSAL:
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Principal Investigator: Terry L. Thomas, Ph.D.
Uniformed Services University of the Health Sciences

Co-Principal Investigator: Daniel A. Hoffman, Ph.D.
The George Washington University

Specific Aims:

The purpose of this effort is to provide epidemiologic support in the coordination of ongoing research and planning of future research in Project Area 1.2, entitled "Risk Estimation for the Deterministic and Stochastic Exposure Effects and the Results of Actual Observations of the Population Health in the Region of the Industrial Association 'Mayak.'" Specific aims are to:

(1) Coordinate activities being conducted under Project Area 1.2.

(2) Develop a long-term Russian American collaborative epidemiologic program for studying the stochastic effects of environmental radiation exposure in populations living near the Mayak Industrial Association.

Background:

On January 14, 1994, the Government of the United States and the Government of the Russian Federation signed the "Agreement on Cooperation in Research on Radiation Effects for the Purpose of Minimization of Consequences of Radioactive Contamination on Health and the Environment". Under the auspices of this agreement, U.S. and Russian scientists will conduct joint collaborative environmental and epidemiologic research. Under the terms of the agreement the Joint Coordinating Committee for Radiation Effects Research (JCCRER) was formed to implement the Program of Cooperation. At the first annual meeting of the JCCRER held October 24-25, 1994, three primary areas of cooperation identified were 1) Medical Aspects of Radiation Exposure Effects on the Population; 2) Research on Medical Consequences of Personnel Exposure to Radiation; and 3) Information Technologies in Research on Radiation Effects and Decision-Making Support. The JCCRER tasked its Executive Committee (EC) with identifying and approving pilot projects to be conducted under the program of cooperation during the first year of the agreement.

The EC approved three projects under area 1.2 entitled "Risk Estimation for the Deterministic and Stochastic Exposure Effects and the Results of Actual

Observations of the Population Health in the Region of the Industrial Association 'Mayak.'" These are: a) physical preservation of existing data; b) evaluation of cancer mortality in relation to radiation exposure among persons living in the vicinity of the Techa River; and c) development of a long-term Russian-American collaborative epidemiologic program for studying the stochastic effects of environmental radiation exposure in populations living near the Mayak Industrial Association.

Methods:

The purpose of this proposal is to establish a mechanism for coordination of the epidemiologic research to be conducted under area 1.2 entitled "Risk Estimation for the Deterministic and Stochastic Exposure Effects and the Results of Actual Observations of the Population Health in the Region of the Industrial Association 'Mayak.'" The Investigators will attend necessary workshops and meetings and will maintain regular and frequent contact with investigators responsible for projects 1.2a, 1.2b, and 1.2c to assist in the coordination of these projects. The Principal Investigator will serve as a scientific liaison to ensure that these projects are fully coordinated with dose reconstruction activities being conducted under Area 1.1 entitled "Dose Reconstruction for the Population Subjected to Radiation." The Investigators will assist in the preparation of progress reports for projects being conducted under Area 1.2 and will ensure that reports are transmitted to the Executive Committee in the appropriate format.

The Investigators will participate with Russian and American scientists in the development of protocols for a long-term Russian-American collaborative program for studying the stochastic effects of environmental radiation exposure in populations living near the Mayak Industrial Association. This activity will be accomplished through a series of exchange visits and small workshops. The Investigators will travel with other American Investigators to Russia as necessary to determine the availability of data on exposed populations and evaluate the feasibility of conducting epidemiologic studies of these populations. Research protocols will be prepared jointly by American and Russian scientists according to the approved "Guidelines for Conducting Scientific Research under the Agreement on Cooperation in Research on Radiation Effects" as amended February 16, 1995. The Investigators will participate in conduct of future research projects according to the role designated in specific research protocols.

Resource Requirements for Calendar Year 1996 (Budget):

DIRECT COSTS:

Personnel:	
Principal Investigator (Dr. Thomas)	
10% Effort (5% will be cost-shared by USUHS)	$ 4,550.00
Fringe Benefits (25%)	$ 1,138.00
Total	$ 5,688.00
Consultant:	
Co-Principal Investigator (Dr. Hoffman)	
10% Effort	$10,000.00
Travel:	
2 people to Russia (2 trips each)	$20,000.00
2 people to ASA Radiation meeting	$ 2,400.00
Equipment:	
Laser Printer	$ 500.00
Other:	
Miscellaneous Supplies	$ 1,000.00
Duplicating	$ 500.00
Total Direct Cost	$40,088.00
INDIRECT COST (Rate 16.02%)	$ 6,422.00
TOTAL	$46,510.00